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10/561,357

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Toshitaka Araga

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EXAMINER

CHOI, PETER Y

ART UNIT

PAPER NUMBER

1771

NOTIFICATION DATE

DELIVERY MODE

09/18/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/561,357	Applicant(s) ARAGA ET AL.	
	Examiner Peter Y. Choi	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/19/05</u> . | 6) <input type="checkbox"/> Other: _____ |

NON-FINAL ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-13, claims 1 and 7 recite a “high elastic non-woven body”. It is unclear what type of non-woven body would differentiate a “high elastic” non-woven body from simply an “elastic” non-woven body as the term “high” is subjective and Applicants’ specification has not provided a measurement or standard of comparison.

Regarding claims 2-5 and 8-11, claims 2 and 8 recite “polyester type low melting point fibers”. The use of “type” is indefinite in a claim. Additionally, claims 2 and 8 recite “regular polyester fibers”. It is unclear what Applicants intend by the limitation “regular” as Applicants’ specification does not provide a standard by which polyester fibers are “regular”.

Regarding claim 6, the claim appears to be missing a word between “thermoplastic resin sheet” and “each other”.

Regarding claims 7-13, claim 7 recites the limitation wherein the thermoplastic resin sheet is “thinner than the high elastic non-woven body”. There is insufficient antecedent basis for the limitation, “high”, in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 6, 7, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,677,027 to Masuda.

Regarding claims 1 and 6, Masuda teaches a formed mat which is thermoformed so as to have a shape following an inside of a room of an automobile and is fitted so as to follow the inside of the room, the formed mat comprises a high elastic non-woven body which is 3.0 mm or more in thickness, 300 g/m² or more in weight per unit area, and less than 0.20 g/cm³ in density, and a thermoplastic resin sheet which is layered on the high elastic non-woven body and which is thinner than the high elastic non-woven body (see entire document including column 1 lines 5-11, column 2 lines 33-63, column 3 lines 12-45, column 4 lines 22-44, column 5 lines 24-65, column 6 lines 6-67, Figure 1).

Regarding claim 6, Masuda does not appear to specifically teach that the recovery percentage in a folding test is 70% or more, wherein the recovery percentage denotes a ratio of an open angle around a folding line at a time when the formed mat is supported at the folding line and is leaved after the formed mat is folded by 180 degrees around a straight line so as to face portions of the thermoplastic resin sheet each other, to an original 180 degrees, since the Masuda invention does not appear to be subjected to such a test. Although the prior art does not disclose the recovery percentage property, the claimed property is deemed to be inherent to the

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structure in the prior art since the Masuda reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention (a thermoformed mat comprising a high elastic non-woven body with the claimed specifications and a thermoplastic resin sheet). Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claims 7 and 13, Masuda teaches a formed mat thermoformed in a shape configured to be fitted inside a room of an automobile, comprising an elastic non-woven body for sound absorption having a thickness of 3.0 mm or more, a weight of 300 g/m^2 or more, and a density of less than 0.20 g/cm^3 , and a thermoplastic resin sheet for sound isolation which is layered on the elastic non-woven body and which is thinner than the high elastic non-woven body (see entire document including column 1 lines 5-11, column 2 lines 33-63, column 3 lines 12-45, column 4 lines 22-44, column 5 lines 24-65, column 6 lines 6-67, Figure 1).

Regarding claim 13, Masuda does not appear to specifically teach that the mat has a recovery percentage of 70% or more as measured by a folding test wherein a test piece of the formed mat is bent on a folding line until portions of the thermoplastic resin sheet touch each other, and an angle α formed at the folding line between the portions of the thermoplastic resin sheet is measured after releasing the bent test piece, wherein the recover percentage is expressed as $\alpha/180^\circ \times 100$, since the Masuda invention does not appear to be subjected to such a test.

Although the prior art does not disclose the recovery percentage property, the claimed property is deemed to be inherent to the structure in the prior art since the Masuda reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention (a thermoformed mat comprising an elastic non-woven body with the claimed

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specifications and a thermoplastic resin sheet). Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Claim Rejections - 35 USC § 102/103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by, or under 35 U.S.C. 103(a) as being obvious over US Pub. No. 2006/0013996 to Koyama.

Regarding claims 1-6, Koyama teaches a formed mat which is thermoformed so as to have a shape following an inside of a room of an automobile and is fitted so as to follow the inside of the room, the formed mat comprises a non-woven body which is 3.0 mm or more in thickness, 300 g/m² or more in weight per unit area, and less than 0.20 g/cm³ in density, and a thermoplastic resin sheet which is layered on the high elastic non-woven body and which is thinner than the high elastic non-woven body (see entire document including paragraphs 0012, 0018-0022, 0028-0032, 0034-0044, 0046, 0048-0050, 0052-0057, 0065, 0066, 0069-0072, 0078, 0079, 0082, 0083, 0089, 0092-0094, Examples 1-21).

Regarding claims 1-6, Koyama does not appear to teach that the non-woven body is high elastic. However, Koyama appears to teach a non-woven body which is substantially similar in structure and composition (non-woven body comprising low-melting polyester fibers) as the claimed non-woven body and as described in Applicants' specification. Therefore, the claimed

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elasticity appears to be inherent to the low-melting polyester fibers. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claims 2-5, the high elastic non-woven body is a needle punched non-woven body which has regular polyester fibers of 50-99% by weight and polyester type low melting point fibers of 1 to 50% by weight, the regular polyester fibers having a fiber diameter of 3 to 15 dtx and a length of 40 to 120 mm, and the polyester type low melting point fibers having a fiber diameter of 3 to 12 dtx and a length of 40 to 90 mm (paragraphs 0031, 0034, 0046, 0048, 0089, Examples 1-21).

Regarding claim 3, the needle punched non-woven body contains, as the regular polyester fibers, two or more types of fibers having different fiber diameters (paragraphs 0031, 0034, 0046, 0048, 0089, Examples 1-21).

Regarding claim 4, Koyama does not appear to specifically teach a surface layer having wear resistance formed in the needle punched non-woven body. However, Koyama does teach that the breathable decorative layer and the breathable multilayer material may be composed of the same or similar materials, with the exception that the breathable decorative layer must have ornamental property and wear resistance (paragraphs 0029, 0039-0041). Therefore, it would have been obvious to one of ordinary skill in the interior material art at the time the invention was made to form non-woven body of Koyama, wherein a surface layer having wear resistance is formed in the needle-punched non-woven body, as Koyama suggests that the breathable decorative layer and the breathable multilayer material may be composed of the same or similar

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materials, such as a multilayer material, so long as the breathable decorative material has ornamental property and wear resistance.

Regarding claim 5, Koyama does not appear to specifically teach that the fibers constituting the surface layer having wear resistance has a color tone different from that of fibers constituting other portions of the needle punched non-woven body, and a decorative pattern is formed by partially taking out the fibers constituting the other portions of the needle punched non-woven body onto a surface of the surface layer having wear resistance. However, since Koyama teaches that the fibers of the surface layer and the fibers constituting other portions of the needle punched non-woven body may comprise various fibers including binder fibers, and since various fibers inherently have different color tones, the claimed limitation appears to be inherent to the structure of the fibers of Koyama. Additionally, it would have been obvious to one of ordinary skill in the interior material art at the time the invention was made to form the invention of Koyama and varying the fibers, as Koyama suggests various fibers suitable for the invention of Koyama and choosing a known commercially available material as suggested by the reference is within the ordinary level of skill in the art.

Koyama appears to teach a substantially similar structure and composition to the claimed invention, including the decorative pattern (*for example*, paragraph 0065). Additionally, the limitation requiring that a decorative pattern is formed by partially taking out the fibers constituting the other portions of the needle punched non-woven body onto a surface of the surface layer having wear resistance appears to be a product by process limitation. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art is identical to or only slightly different than the claimed article. Even though product-by-process

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claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. The burden has been shifted to Applicant to show unobvious difference between the claimed product and the prior art product. The applied prior art either anticipated or strongly suggested the claimed subject matter. It is noted that if Applicant intends to rely on Examples in the specification or in a submitted declaration to show unobviousness, Applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the applied prior art.

Regarding claim 6, Koyama does not appear to specifically teach that the recovery percentage in a folding test is 70% or more, wherein the recovery percentage denotes a ratio of an open angle around a folding line at a time when the formed mat is supported at the folding line and is leaved after the formed mat is folded by 180 degrees around a straight line so as to face portions of the thermoplastic resin sheet each other, to an original 180 degrees, since the Koyama invention does not appear to be subjected to such a test. Although the prior art does not disclose the recovery percentage property, the claimed property is deemed to be inherent to the structure in the prior art since the Koyama reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention (a thermoformed mat comprising a high elastic non-woven body with the claimed specifications and a thermoplastic resin sheet). Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

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Regarding claims 7-13, Koyama teaches a formed mat thermoformed in a shape configured to be fitted inside a room of an automobile, comprising an elastic non-woven body for sound absorption having a thickness of 3.0 mm or more, a weight of 300 g/m^2 or more, and a density of less than 0.20 g/cm^3 , and a thermoplastic resin sheet for sound isolation which is layered on the elastic non-woven body and which is thinner than the high elastic non-woven body (see entire document including paragraphs 0012, 0018-0022, 0028-0032, 0034-0044, 0046, 0048-0050, 0052-0057, 0065, 0066, 0069-0072, 0078, 0079, 0082, 0083, 0089, 0092-0094, Examples 1-21).

Regarding claims 7-13, Koyama does not appear to teach that the non-woven body is high elastic. However, Koyama appears to teach a non-woven body which is substantially similar in structure and composition (non-woven body comprising low-melting polyester fibers) as the claimed non-woven body and as described in Applicants' specification. Therefore, the claimed elasticity appears to be inherent to the low-melting polyester fibers. Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

Regarding claims 8-11, the elastic non-woven body is needle punched and comprises 50-99% by weight of regular polyester fibers having a fiber diameter of 3 to 15 dtx and a length of 40 to 120 mm and 1 to 50% by weight of polyester-type low melting point fibers having a fiber diameter of 3 to 12 dtx and a length of 40 to 90 mm (paragraphs 0031, 0034, 0046, 0048, 0089, Examples 1-21).

Regarding claim 9, the non-woven body contains, as the regular polyester fibers, two or more types of fibers having different fiber diameters (paragraphs 0031, 0034, 0046, 0048, 0089, Examples 1-21).

Regarding claim 10, Koyama does not appear to specifically teach that the non-woven body further comprises a surface layer having wear resistance. However, Koyama does teach that the breathable decorative layer and the breathable multilayer material may be composed of the same or similar materials, with the exception that the breathable decorative layer must have ornamental property and wear resistance (paragraphs 0029, 0039-0041). Therefore, it would have been obvious to one of ordinary skill in the interior material art at the time the invention was made to form non-woven body of Koyama, wherein a surface layer having wear resistance is formed in the needle-punched non-woven body, as Koyama suggests that the breathable decorative layer and the breathable multilayer material may be composed of the same or similar materials, such as a multilayer material, so long as the breathable decorative material has ornamental property and wear resistance.

Regarding claim 11, Koyama does not appear to specifically teach that the fibers constituting the surface layer having wear resistance has a color tone different from that of fibers constituting other portions of the needle punched non-woven body, and a decorative pattern is formed by partially taking out the fibers constituting the other portions of the needle punched non-woven body onto a surface of the surface layer having wear resistance. However, since Koyama teaches that the fibers of the surface layer and the fibers constituting other portions of the needle punched non-woven body may comprise various fibers including binder fibers, and since various fibers inherently have different color tones, the claimed limitation appears to be

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inherent to the structure of the fibers of Koyama. Additionally, it would have been obvious to one of ordinary skill in the interior material art at the time the invention was made to form the invention of Koyama and varying the fibers, as Koyama suggests various fibers suitable for the invention of Koyama and choosing a known commercially available material as suggested by the reference is within the ordinary level of skill in the art.

Koyama appears to teach a substantially similar structure and composition to the claimed invention, including the decorative pattern (*for example*, paragraph 0065). Additionally, the limitation requiring that a decorative pattern is formed by partially taking out the fibers constituting the other portions of the needle punched non-woven body onto a surface of the surface layer having wear resistance appears to be a product by process limitation. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art is identical to or only slightly different than the claimed article. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. The burden has been shifted to Applicant to show unobvious difference between the claimed product and the prior art product. The applied prior art either anticipated or strongly suggested the claimed subject matter. It is noted that if Applicant intends to rely on Examples in the specification or in a submitted declaration to show unobviousness, Applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the applied prior art.

Regarding claim 12, the mat further comprises a felt layer layered underneath the thermoplastic resin sheet (paragraphs 0028-0030, 0066).

Regarding claim 13, Koyama does not appear to specifically teach that the mat has a recovery percentage of 70% or more as measured by a folding test wherein a test piece of the formed mat is bent on a folding line until portions of the thermoplastic resin sheet touch each other, and an angle α formed at the folding line between the portions of the thermoplastic resin sheet is measured after releasing the bent test piece, wherein the recover percentage is expressed as $\alpha/180^\circ \times 100$, since the Koyama invention does not appear to be subjected to such a test. Although the prior art does not disclose the recovery percentage property, the claimed property is deemed to be inherent to the structure in the prior art since the Koyama reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention (a thermoformed mat comprising an elastic non-woven body with the claimed specifications and a thermoplastic resin sheet). Properties are the same when the structure and composition are the same. The burden is on the Applicants to prove otherwise.

In the event it is shown that Koyama does not disclose the claimed invention with sufficient specificity, the invention is obvious because Koyama discloses the claimed constituents and discloses that they may be used in combination.

Conclusion

USPN 5,508,080 to Sorimachi is prior art made of record but not relied upon in this rejection as it is pertinent to Applicants' disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571) 272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew T Piziali/
Primary Examiner, Art Unit 1771

/Peter Y. Choi/
Examiner, Art Unit 1771
September 11, 2007